## (FILE 'HOME' ENTERED AT 12:58:33 ON 21 OCT 2003)

FILE 'CAPLUS' ENTERED AT 12:58:48 ON 21 OCT 2003 L1 1 S US200200159961/PN SELECT L1:1 RN

FILE 'REGISTRY' ENTERED AT 12:59:23 ON 21 OCT 2003

L2	1 S E4	
L3	1 S E5	
L4	1 S E6	
L5	1 S E7	
L6	1 S E8	
L7	1 S E9	
T.R	1 S E10	

=> save all

ENTER NAME OR (END):gellingagent/l L# LIST L1-L8 HAS BEEN SAVED AS 'GELLINGAGENT/L' 75% OF LIMIT FOR SAVED L# LISTS REACHED

· 4

E1	1	109-73-9/BI
E2	1	111-64-8/BI
E3	1	16177-21-2/BI
E4	1	486455-65-6/BI
E5	1	486455-66-7/BI
E6	1	486455-67-8/BI
E7	1	486455-68-9/BI
E8	1	486455-69-0/BI
E9	1	486455-70-3/BI
E10	1	486455-71-4/BI
E11	1	63663-21-8/BI
E12	1	760-67-8/BI

.

. -

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-65-6 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(2-ethyl-1-oxohexyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C21 H41 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s e5

L3 1 486455-66-7/BI

=> d

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-66-7 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxooctyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C21 H41 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s e6

L4 1 486455-67-8/BI

=> d

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-67-8 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxodecyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C23 H45 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

## Absolute stereochemistry.

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s e7

L5 1 486455-68-9/BI

=> d

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-68-9 REGISTRY

CN Pentanediamide, 2-(acetylamino)-N,N'-dibutyl-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C15 H29 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# Absolute stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s e8

L6

1 486455-69-0/BI

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-69-0 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxohexyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C19 H37 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

## Absolute stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s e9~

L7 1 486455-70-3/BI

=> d

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-70-3 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxotetradecyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H53 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# Absolute stereochemistry.

### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE) '
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-71-4 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxopentadecyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H55 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

# Absolute stereochemistry.

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 486455-65-6 REGISTRY
CN Pentanediamide, N,N'-dibutyl-2-[(2-ethyl-1-oxohexyl)amino]-, (2S)- (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
MF C21 H41 N3 O3
SR CA
```

Absolute stereochemistry.

LC

STN Files: CA, CAPLUS, USPATFULL

# Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	+=====================================	+=======  pH 1	(1) ACD
Bioconc. Factor (BCF)	333	pH 4	(1) ACD
Bioconc. Factor (BCF)	333	pH 7	(1) ACD
Bioconc. Factor (BCF)	333	8 Hq	(1) ACD
Bioconc, Factor (BCF)	333	pH 10	(1) ACD
Boiling Point (BP)	642.0+/-50.0 deg C	-	(1) ACD
Enthalpy of Vap. (HVAP)	94.76+/-3.0 kJ/mol		(1) ACD
Flash Point (FP)	190.5+/-54.5 deg C	j	(1) ACD
Freely Rotatable Bonds (FRB)	19		(1) ACD
H acceptors (HAC)	6		(1) ACD
H donors (HD)	3		(1) ACD
Koc (KOC)	2101	pH 1	(1) ACD
Koc (KOC)	2222	pH 4	(1) ACD
Koc (KOC)	2222	pH 7	(1) ACD
Koc (KOC)	2222	8 Hq	(1) ACD
Koc (KOC)	2222	pH 10	(1) ACD
logD (LOGD)	3.60	pH 1	(1) ACD
logD (LOGD)	3.62	pH 4	(1) ACD
logD (LOGD)	3.62	pH 7	(1) ACD
logD (LOGD)	3.62	pH 8	(1) ACD
logD (LOGD)	3.62	pH 10	(1) ACD
logP (LOGP)	3.622+/-0.560		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	рн 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 8	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	383.57		(1) ACD
Vapor Pressure (VP)	2.24E-16 Torr	25.0 deg C	(1) ACD

<sup>(1)</sup> Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.76 ((C) 1994-2003 ACD)

<sup>1</sup> REFERENCES IN FILE CA (1907 TO DATE)

### 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

#### REFERENCE 1

- AN 138:106999 CA
- TI Preparation of N-acyl-L-aspartic and -glutamic acid diamides for gel compositions and cosmetics
- IN Yamamoto, Naoya; Yoshihara, Hideki
- PA Ajinomoto Co., Inc., Japan
- SO Fr. Demande, 23 pp. CODEN: FRXXBL
- DT Patent
- LA French
- IC ICM C07C225-06 ICS A61K007-027; A61K007-32
- CC 34-2 (Amino Acids, Peptides, and Proteins)
  Section cross-reference(s): 62

#### FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2820739	A1	20020816	FR 2002-1751	20020213
	JP 2002316971	A2	20021031	JP 2002-31820	20020208
	US 2002159961	A1	20021031	US 2002-73226	20020213

- PRAI JP 2001-35011 20010213
- AB Title amides R3CO-L-Asp(NHR1)NHR2 and R3CO-L-Glu(NHR1)NHR2 (R1, R2 are C1-C26 hydrocarbyl and R3 is C7-C10 hydrocarbyl) were prepd. for obtaining gelling agents, gel compns., and cosmetics. Thus, N-(2-ethylhexanoyl)-L-glutamic acid dibutylamide was prepd. from sodium glutamate by acylation with 2-ethylhexanoyl chloride and amidation with dibutylamine. Synthetic dibutylamides were evaluated for gelling aptitude.
- ST acyl aspartic glutamic acid diamide prepn gel compn
- IT Cosmetics
  - (gels; prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)
- IT 63663-21-8P 486455-65-6P 486455-66-7P 486455-67-8P 486455-68-9P 486455-69-0P 486455-70-3P 486455-71-4P
  - RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
    - (prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)
- IT 109-73-9, Butylamine, reactions 111-64-8, Octanoyl chloride 760-67-8, 2-Ethylhexanoyl chloride 16177-21-2, Sodium glutamate
  - RL: RCT (Reactant); RACT (Reactant or reagent)
    - (prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

```
AN 138:106999 CA
```

- TI Preparation of N-acyl-L-aspartic and -glutamic acid diamides for gel compositions and cosmetics
- IN Yamamoto, Naoya; Yoshihara, Hideki
- PA Ajinomoto Co., Inc., Japan
- SO Fr. Demande, 23 pp. CODEN: FRXXBL
- DT Patent
- LA French
- IC ICM C07C225-06 ICS A61K007-027; A61K007-32
- CC 34-2 (Amino Acids, Peptides, and Proteins)
  Section cross-reference(s): 62

#### FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	JP 2002316971	A2	20021031	JP 2002-31820	20020208
	US 2002159961	A1	20021031	US 2002-73226	20020213

PRAI JP 2001-35011 20010213

- AB Title amides R3CO-L-Asp(NHR1)NHR2 and R3CO-L-Glu(NHR1)NHR2 (R1, R2 are C1-C26 hydrocarbyl and R3 is C7-C10 hydrocarbyl) were prepd. for obtaining gelling agents, gel compns., and cosmetics. Thus, N-(2-ethylhexanoyl)-L-glutamic acid dibutylamide was prepd. from sodium glutamate by acylation with 2-ethylhexanoyl chloride and amidation with dibutylamine. Synthetic dibutylamides were evaluated for gelling aptitude.
- ST acyl aspartic glutamic acid diamide prepn gel compn
- IT Cosmetics
  - (gels; prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)
- IT 63663-21-8P 486455-65-6P 486455-66-7P 486455-67-8P 486455-68-9P 486455-69-0P 486455-70-3P 486455-71-4P
  - RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
- IT 109-73-9, Butylamine, reactions 111-64-8, Octanoyl chloride 760-67-8,
  2-Ethylhexanoyl chloride 16177-21-2, Sodium glutamate
  RL: RCT (Reactant); RACT (Reactant or reagent)
  - (prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

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L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN RN 486455-69-0 REGISTRY
```

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxohexyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C19 H37 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

# Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NO.	TE
Bioconc. Factor (BCF)	+=====================================	+=======  pH 1	⊦===:   (1)	ACD
Bioconc. Factor (BCF)	71.6	pH 4	(1)	ACD
Bioconc. Factor (BCF)	71.6	рн 7		ACD
Bioconc. Factor (BCF)	71.6	8 Hq	,	ACD
Bioconc. Factor (BCF)	71.6	pH 10	(1)	ACD
Boiling Point (BP)	632.6+/-50.0 deg C			ACD
Enthalpy of Vap. (HVAP)	93.52+/-3.0 kJ/mol		(1)	ACD
Flash Point (FP)	201.5+/-54.5 deg C		(1)	
Freely Rotatable Bonds (FRB)				ACD
H acceptors (HAC)	6		(1)	ACD
H donors (HD)	İ3		(1)	ACD
Koc (KOC)	696	pH 1	(1)	
Koc (KOC)	İ 739	pH 4	(1)	
Koc (KOC)	739	pH 7	(1)	ACD
Koc (KOC)	739	pH 8	(1)	ACD
Koc (KOC)	739	pH 10	(1)	ACD
logD (LOGD)	2.72	pH 1	(1)	ACD
logD (LOGD)	2.74	pH 4	(1)	ACD
logD (LOGD)	2.74	pH 7	(1)	ACD
logD (LOGD)	2.74	рн 8	(1)	ACD
logD (LOGD)	2.74	pH 10	(1)	ACD
logP (LOGP)	2.743+/-0.557		(1)	ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1)	ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1)	ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	рн 7	(1)	ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 8	(1)	ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1)	ACD
Molecular Weight (MW)	355.52	ĺ	(1)	ACD
Vapor Pressure (VP)	6.59E-16 Torr	25.0 deg C	(1)	ACD

<sup>(1)</sup> Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.76 ((C) 1994-2003 ACD)

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

#### REFERENCE 1

```
AN
     138:106999 CA
TI
     Preparation of N-acyl-L-aspartic and -glutamic acid diamides for gel
     compositions and cosmetics
IN
     Yamamoto, Naoya; Yoshihara, Hideki
PΑ
     Ajinomoto Co., Inc., Japan
SO
     Fr. Demande, 23 pp.
     CODEN: FRXXBL
DT
     Patent
LA
     French
IC
     ICM C07C225-06
     ICS A61K007-027; A61K007-32
CC
     34-2 (Amino Acids, Peptides, and Proteins)
     Section cross-reference(s): 62
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
     ------
                      ----
     FR 2820739
                      A1
                           20020816
                                           FR 2002-1751
                                                            20020213
     JP 2002316971
                      A2
                            20021031
                                           JP 2002-31820
                                                            20020208
     US 2002159961
                      A1
                            20021031
                                           US 2002-73226
                                                            20020213
PRAI JP 2001-35011
                      20010213
     Title amides R3CO-L-Asp(NHR1)NHR2 and R3CO-L-Glu(NHR1)NHR2 (R1, R2 are
     C1-C26 hydrocarbyl and R3 is C7-C10 hydrocarbyl) were prepd. for obtaining
     gelling agents, gel compns., and cosmetics. Thus, N-(2-ethylhexanoyl)-L-
     glutamic acid dibutylamide was prepd. from sodium glutamate by acylation
     with 2-ethylhexanoyl chloride and amidation with dibutylamine. Synthetic
     dibutylamides were evaluated for gelling aptitude.
ST
     acyl aspartic glutamic acid diamide prepn gel compn
TΤ
     Cosmetics
        (gels; prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel
        compns. and cosmetics)
IT
     63663-21-8P
                  486455-65-6P
                                  486455-66-7P
                                                 486455-67-8P
                                                                486455-68-9P
     486455-69-0P
                   486455-70-3P
                                  486455-71-4P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (prepn. of N-acyl-L-aspartic and -glutamic acid diamides for qel
        compns. and cosmetics)
                                     111-64-8, Octanoyl chloride
IT
     109-73-9, Butylamine, reactions
                                                                     760-67-8,
     2-Ethylhexanoyl chloride 16177-21-2, Sodium glutamate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel
        compns. and cosmetics)
=> d 17 all
L7
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     486455-70-3 REGISTRY
CN
     Pentanediamide, N,N'-dibutyl-2-[(1-oxotetradecyl)amino]-, (2S)- (9CI)
     INDEX NAME)
FS
     STEREOSEARCH
MF
    C27 H53 N3 O3
SR
LC
     STN Files:
                 CA, CAPLUS, USPATFULL
```

Absolute stereochemistry.

# Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
=======================================	+===========	+========	<b>+=====</b>
Bioconc. Factor (BCF)	114638	pH 1	(1) ACD
Bioconc. Factor (BCF)	121519	pH 4	(1) ACD
Bioconc. Factor (BCF)	121527	pH 7	(1) ACD
Bioconc. Factor (BCF)	121527	8 Hg	(1) ACD
Bioconc. Factor (BCF)	121524	pH 10	(1) ACD
Boiling Point (BP)	694.9+/-50.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (HVAP)	101.78+/-3.0 kJ/mol	;	(1) ACD
Flash Point (FP)	167.8+/-54.5 deg C	j	(1) ACD
Freely Rotatable Bonds (FRB)	26	j	(1) ACD
H acceptors (HAC)	İ6	j	(1) ACD
H donors (HD)	із	j	(1) ACD
Koc (KOC)	143076	pH 1	(1) ACD
Koc (KOC)	151664	pH 4	(1) ACD
Koc (KOC)	151673	рн 7	(1) ACD
Koc (KOC)	151673	8 Hg	(1) ACD
Koc (KOC)	151670	pH 10	(1) ACD
logD (LOGD)	6.97	рн 1	(1) ACD
logD (LOGD)	6.99	pH 4	(1) ACD
logD (LOGD)	6.99	рн 7	(1) ACD
logD (LOGD)	6.99	8 Hg	(1) ACD
logD (LOGD)	6.99	pH 10	(1) ACD
logP (LOGP)	6.994+/-0.557		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	рн 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	B Hq	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	467.73		(1) ACD
Vapor Pressure (VP)	3.70E-19 Torr	25.0 deg C	• •

- (1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.76 ((C) 1994-2003 ACD)
  - 1 REFERENCES IN FILE CA (1907 TO DATE)
  - 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

#### REFERENCE 1

AN 138:106999 CA

TI Preparation of N-acyl-L-aspartic and -glutamic acid diamides for gel compositions and cosmetics

IN Yamamoto, Naoya; Yoshihara, Hideki

PA Ajinomoto Co., Inc., Japan

SO Fr. Demande, 23 pp. CODEN: FRXXBL

DT Patent

LA French

IC ICM C07C225-06

ICS A61K007-027; A61K007-32

CC 34-2 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	FR 2820739	A1	20020816	FR 2002-1751	20020213
	JP 2002316971	A2	20021031	JP 2002-31820	20020208
	US 2002159961	<b>A1</b>	20021031	US 2002-73226	20020213

PRAI JP 2001-35011 20010213

AB Title amides R3CO-L-Asp(NHR1)NHR2 and R3CO-L-Glu(NHR1)NHR2 (R1, R2 are C1-C26 hydrocarbyl and R3 is C7-C10 hydrocarbyl) were prepd. for obtaining gelling agents, gel compns., and cosmetics. Thus, N-(2-ethylhexanoyl)-L-glutamic acid dibutylamide was prepd. from sodium glutamate by acylation with 2-ethylhexanoyl chloride and amidation with dibutylamine. Synthetic dibutylamides were evaluated for gelling aptitude.

ST acyl aspartic glutamic acid diamide prepn gel compn

IT Cosmetics

(gels; prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

IT 63663-21-8P 486455-65-6P 486455-66-7P 486455-67-8P 486455-68-9P 486455-69-0P 486455-70-3P 486455-71-4P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

IT 109-73-9, Butylamine, reactions 111-64-8, Octanoyl chloride 760-67-8, 2-Ethylhexanoyl chloride 16177-21-2, Sodium glutamate

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

#### => d 18 all

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486455-71-4 REGISTRY

CN Pentanediamide, N,N'-dibutyl-2-[(1-oxopentadecyl)amino]-, (2S)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C28 H55 N3 O3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

### Absolute stereochemistry.

# Calculated Properties (CALC)

```
Bioconc. Factor (BCF)
                              1290459
                                                   pH 1
                                                               (1) ACD
Bioconc, Factor (BCF)
                              307892
                                                   pH 4
                                                               (1) ACD
Bioconc. Factor (BCF)
                              307911
                                                               (1) ACD
                                                   7 Hq
Bioconc. Factor (BCF)
                              307911
                                                   pH 8
                                                               (1) ACD
Bioconc. Factor (BCF)
                              307904
                                                    pH 10
                                                               (1) ACD
Boiling Point (BP)
                               703.1+/-55.0 deg C
                                                   |760.0 Torr|(1) ACD
Enthalpy of Vap. (HVAP)
                              102.90 + / -3.0 \text{ kJ/mol}
                                                               (1) ACD
Flash Point (FP)
                               163.7+/-57.0 deg C
                                                               (1) ACD
Freely Rotatable Bonds (FRB) 27
                                                               (1) ACD
H acceptors (HAC)
                               6
                                                               (1) ACD
H donors (HD)
                              13
                                                               (1) ACD
Koc (KOC)
                              278336
                                                   pH 1
                                                               (1) ACD
Koc (KOC)
                              295043
                                                               (1) ACD
                                                   pH 4
Koc (KOC)
                              295060
                                                   pH 7
                                                               (1) ACD
Koc (KOC)
                              295060
                                                               (1) ACD
                                                   8 Hq
Koc (KOC)
                                                   pH 10
                              295054
                                                               (1) ACD
logD (LOGD)
                              7.50
                                                               (1) ACD
                                                   pH 1
logD (LOGD)
                              7.52
                                                               (1) ACD
                                                   pH 4
loqD (LOGD)
                              7.52
                                                   pH 7
                                                               (1) ACD
logD (LOGD)
                              7.52
                                                   8 Hg
                                                               (1) ACD
logD (LOGD)
                              7.52
                                                   pH 10
                                                               (1) ACD
logP (LOGP)
                              7.526+/-0.557
                                                               (1) ACD
Molar Solubility (SLB.MOL)
                              <0.01 \text{ mol/L}
                                                   pH 1
                                                               (1) ACD
Molar Solubility (SLB.MOL)
                              <0.01 mol/L
                                                               (1) ACD
                                                   pH 4
Molar Solubility (SLB.MOL)
                              <0.01 mol/L
                                                               (1) ACD
                                                   pH 7
Molar Solubility (SLB.MOL)
                              <0.01 mol/L
                                                               (1) ACD
                                                   B Hq
Molar Solubility (SLB.MOL)
                              <0.01 mol/L
                                                   pH 10
                                                               (1) ACD
Molecular Weight (MW)
                              481.75
                                                               (1) ACD
Vapor Pressure (VP)
                             1.28E-19 Torr
                                                   25.0 deg C (1) ACD
```

- (1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.76 ((C) 1994-2003 ACD)
  - 1 REFERENCES IN FILE CA (1907 TO DATE)
  - 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

#### REFERENCE, 1

- AN 138:106999 CA
- TI Preparation of N-acyl-L-aspartic and -glutamic acid diamides for gel compositions and cosmetics
- IN Yamamoto, Naoya; Yoshihara, Hideki
- PA Ajinomoto Co., Inc., Japan
- SO Fr. Demande, 23 pp. CODEN: FRXXBL
- DT Patent
- LA French
- IC ICM C07C225-06
  - ICS A61K007-027; A61K007-32
- CC 34-2 (Amino Acids, Peptides, and Proteins)
   Section cross-reference(s): 62

FAN. CNT 1

L'ATIV	CIVI				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2820739	A1	20020816	FR 2002-1751	20020213
	JP 2002316971	A2	20021031	JP 2002-31820	20020208
	US 2002159961	A1	20021031	US 2002-73226	20020213
PRAI	JP 2001-35011	20010	213		

AB Title amides R3CO-L-Asp(NHR1)NHR2 and R3CO-L-Glu(NHR1)NHR2 (R1, R2 are C1-C26 hydrocarbyl and R3 is C7-C10 hydrocarbyl) were prepd. for obtaining gelling agents, gel compns., and cosmetics. Thus, N-(2-ethylhexanoyl)-L-glutamic acid dibutylamide was prepd. from sodium glutamate by acylation with 2-ethylhexanoyl chloride and amidation with dibutylamine. Synthetic dibutylamides were evaluated for gelling aptitude.

ST acyl aspartic glutamic acid diamide prepn gel compn

IT Cosmetics

(gels; prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)

IT 63663-21-8P 486455-65-6P 486455-66-7P 486455-67-8P 486455-68-9P 486455-69-0P 486455-70-3P 486455-71-4P RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel

compns. and cosmetics)

IT 109-73-9, Butylamine, reactions 111-64-8, Octanoyl chloride 760-67-8, 2-Ethylhexanoyl chloride 16177-21-2, Sodium glutamate RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of N-acyl-L-aspartic and -glutamic acid diamides for gel compns. and cosmetics)